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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,836

02/07/2007

Haruo Toyoda

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EXAMINER

AZIZ, KEITH T

ART UNIT

PAPER NUMBER

4122

MAIL DATE

DELIVERY MODE

02/25/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/562,836	Applicant(s) TOYODA ET AL.	
	Examiner KEITH T. AZIZ	Art Unit 4122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/29/2005; 10/17/2007</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claim 3 is objected to under 37 CFR 1.75(c) as being in improper multi dependent form. See MPEP § 608.01(n). Acceptable multiple dependant claim wording examples are set forth under MPEP § 608.01(n) (A). Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1 rejected under 35 U.S.C. 102(e) as being anticipated by Ito et al. (U.S. Patent Application 2004/0234637), hereafter referred to as Ito.

Ito discloses a tire vulcanizing unit method and apparatus. Ito teaches a tire vulcanizer for vulcanizing a green tire. See item 113 of Figure 8, as well as Paragraph [0260] of Ito. Ito further teaches a post cure inflator for treating a tire after vulcanization. See item 27 of Figure 4, as well as Paragraph [0182] of Ito. Ito also teaches a transfer device for receiving the vulcanized tire from the vulcanizer and transferring the tire to

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the rim of the post cure inflator. See items 111, 114, and 115 in Figure 8, as well as paragraph [0226] of Ito. Additionally, Ito teaches that the tire transferring apparatus is capable of rotatably holding the tire and placing it at a predetermined location in the post cure inflator. See paragraph [0227], as well as item 4 of Figure 2 of Ito.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito as applied to claim 1 above, and further in view of Ogawa (U.S. Patent Application Publication 2002/0014301), hereinafter referred to as Ogawa.

Ito teaches a tire vulcanizing system with a rotatably operated transferring device that can operate at angular positions, a vulcanizer, and a post cure inflator as discussed above. Ito does not teach a system for positioning the tire at a radial force variation peak value on a portion of the rim of the post cure inflator.

Ogawa discloses a method of correcting radial force variation of a tire, and the apparatus for doing so. Ogawa teaches that the process to correct the radial force variation can be carried out by the post cure inflator immediately after vulcanizing the tire by determining a specific position with a specific radial force variation peak value. See Figures 2-3, and 6 as well as paragraphs [0053] and [0054] in Ogawa. It would have been obvious to one of ordinary skill in the art at the time of invention to include the system as taught by Ogawa in the apparatus as taught by Ito. The rationale to do so would have been the motivation to advantageously improve the radial force variation among uniformity characteristics of a pneumatic radial tire and thereby improve performance. See paragraphs [0002] and [0004] of Ogawa.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references are cited to further show the state of the art with regard to tire vulcanization.

U.S. Patent Application 2002/0177964 to Shteinhauz, drawn to a method for correcting and determining RFV.

U.S. Patent 6,660,212 to Balter et al., drawn to a method for determining and correcting RFV.

U.S. Patent 6,585,918 to Kumagai et al., drawn to a method for determining and correcting RFV.

U.S. Patent 6,203,748 to Kumagai, drawn to a tire vulcanizing apparatus that considers RFV.

U.S. Patent 5,441,393 to Fujieda et al., drawn to a tire vulcanization apparatus.

U.S. Patent 6,241,501 to Mitamura, drawn to a tire vulcanization apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEITH T. AZIZ whose telephone number is (571)270-7658. The examiner can normally be reached on Monday through Friday 8:00am-5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571)272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KTA/
Patent Examiner

/Milton I. Cano/
Supervisory Patent Examiner, Art Unit 4122

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